

OLT 23 2003

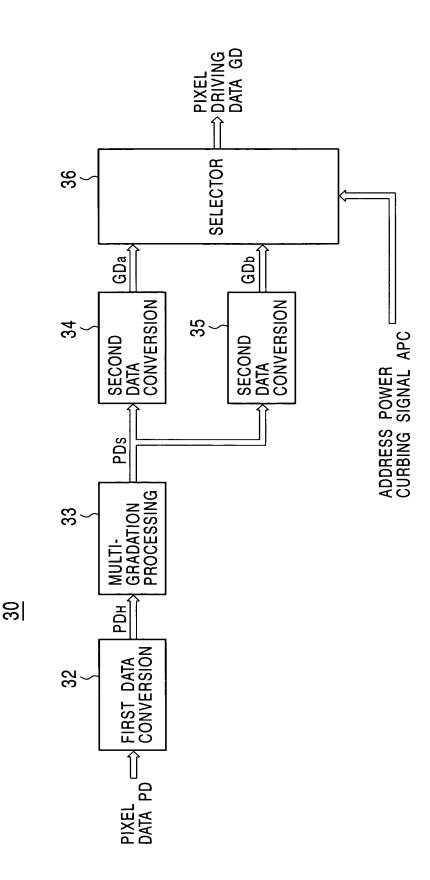
FIG. 2

Takashi IWAMI et al. Filed: June 26, 2003 Q76222 Croup Art Unit: 2673

Group Art Unit: 2673 U.S. Appln No. 10/603,616 (202) 293-7060

۷/ ۱۵

Sheet 2 of 16

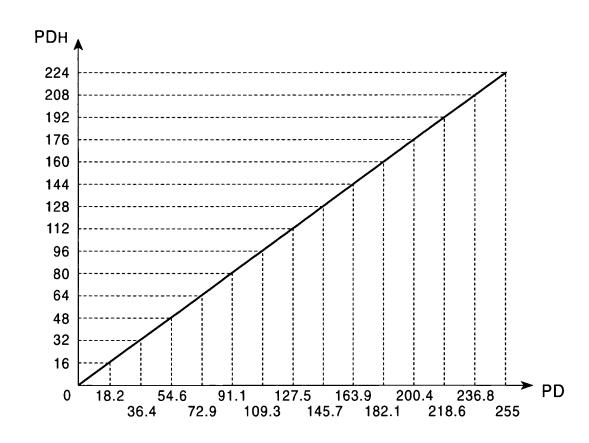


3/10

Sheet 3 of 16



FIG. 3



Sheet 4 of 16



<u>Е</u>

(SELECTIVE ERASURE)

	—— Ш О															
EMITTED		0	4	16	36	89	108	160	224	300	388	488	009	728	898	1024
LIGHT-EMISSION DRIVING PATTERN FOR ONE FIELD	SF S												• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • •	• 0 0 0 0 0 0 0 0 0 0 0 0	00000000000000
	12 13 14	1	-	-	-	- -	-	0	0 0							
ᅟ	5	-	-	-	_	-	-	_	-	-	_	_	-	0	0	0
SECOND UIT 34	10 11	-	_	_	-	-	-	_	_	_	_	_	0	0	0	0
SE		-	_	_	_	-	_	_	-	_	_	0	0	0	0	
OF SE	6 8		_	_	_	_	_	_	_	_	0	0	_	0	0	
	GDa 7		_	_	_	_	_	_		0	0	0	0	0	0	
TABLE SION	დ	_	_	_	_	-	_	0	0	0	0	0	0	0	0	0
T.A RSI	ည	-	_	_	_	_	0	0	0	0	0	0	0	0	0	0
RSION TABLI CONVERSION	4	-	-	_	-	0	0	0	0	0	0	0	0	0	0	0
RSI	က	-	-	-	0	0	0	0	0	0	0	0	0	0	0	0
ш	8	-	_	0	0	0	0	0	0	0	0	0	0	0	0	
CONVERSION DATA CONVE	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	PDs	0000	0001	0010	0011	0100	0101	0110	0111	1000	1001	1010	1011	1100	1101	1110
GRADATION		-	2	က	4	2	9	7	ω	တ	10	=	12	13	14	15

BLACK CIRCLES: SELECTIVE ERASING DISCHARGE WHITE CIRCLES: SUSTAINED DISCHARGE EMISSION

Takashi IWAMI et al. Filed: June 26, 2003 Q76222

Group Art Unit: 2673 U.S. Appln No. 10/603,616 (202) 293-7060

īυ

Sheet 5 of 16



FIG. 5

(SELECTIVE ERASURE)

EMITTED		0	4	16	36	89	108	160	224	300	388	488	009	728	868	1024
LIGHT-EMISSION DRIVING PATTERN FOR ONE FIELD	SF S		• 0	• 0 0	• 0 0 0	• 0 0 0 0	• 0 0 0 0 0	• 0 0 0 0 0 0	• 0 0 0 0 0 0 0	• 0 0 0 0 0 0 0	• 0 0 0 0 0 0 0 0	• 0 0 0 0 0 0 0 0 0	• 0 0 0 0 0 0 0 0 0 0	• 0 0 0 0 0 0 0 0 0 0 0		00000000000000
CONVERSION TABLE OF SECOND DATA CONVERSION CIRCUIT 35	PDs 1 2 3 4 5 6 7 8 9 10 11 12 13 14	0 0 0 0 0 0 0 0 0	001 0 1 0 0 0 0 0 0 0 0 0 0 0 0	0010 0 0 1 0 0 0 0 0 0 0 0 0 0 0	0011 0 0 0 1 0 0 0 0 0 0 0 0 0 0	1100 0 0 0 0 1 0 0 0 0 0 0 0 0 0	1101 0 0 0 0 0 1 0 0 0 0 0 0 0 0	1110 0 0 0 0 0 1 0 0 0 0 0 0 0	1111 0 0 0 0 0 0 0 1 0 0 0 0 0	000 0 0 0 0 0 0 0 0 1 0 0 0 0 0	001 0 0 0 0 0 0 0 0 1 0 0 0 0	010 0 0 0 0 0 0 0 0 0 1 0 0 0	011 0 0 0 0 0 0 0 0 0 0 1 0 0	100 0 0 0 0 0 0 0 0 0 0 0 1 0	1101 0 0 0 0 0 0 0 0 0 0 0 0 0 1	1110 0 0 0 0 0 0 0 0 0 0 0 0 0 0
GRADATION		1	2 0	0 8	4 0	2	9	7 0	8	9	10	=	12	13	14	15

BLACK CIRCLES: SELECTIVE ERASING DISCHARGE WHITE CIRCLES: SUSTAINED DISCHARGE EMISSION

Takashi IWAMI et al. Filed: June 26; 2003

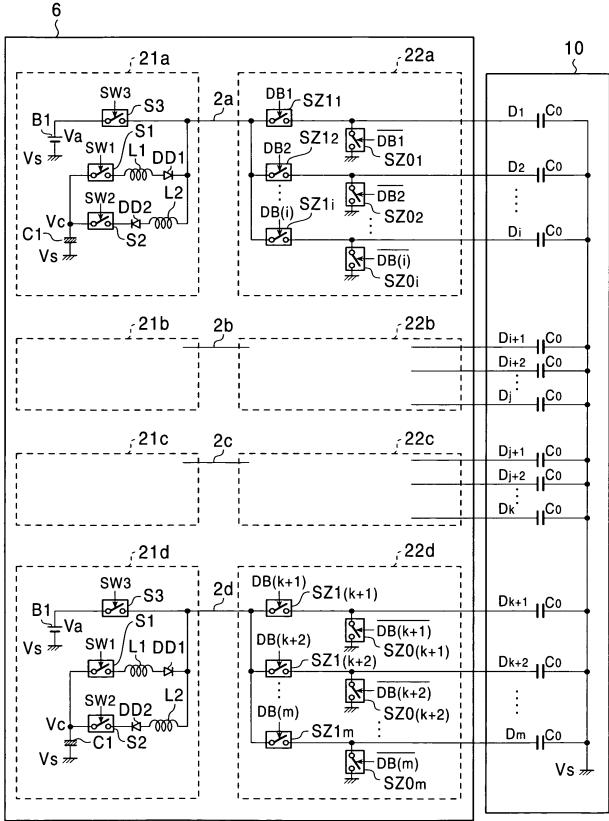
Q76222

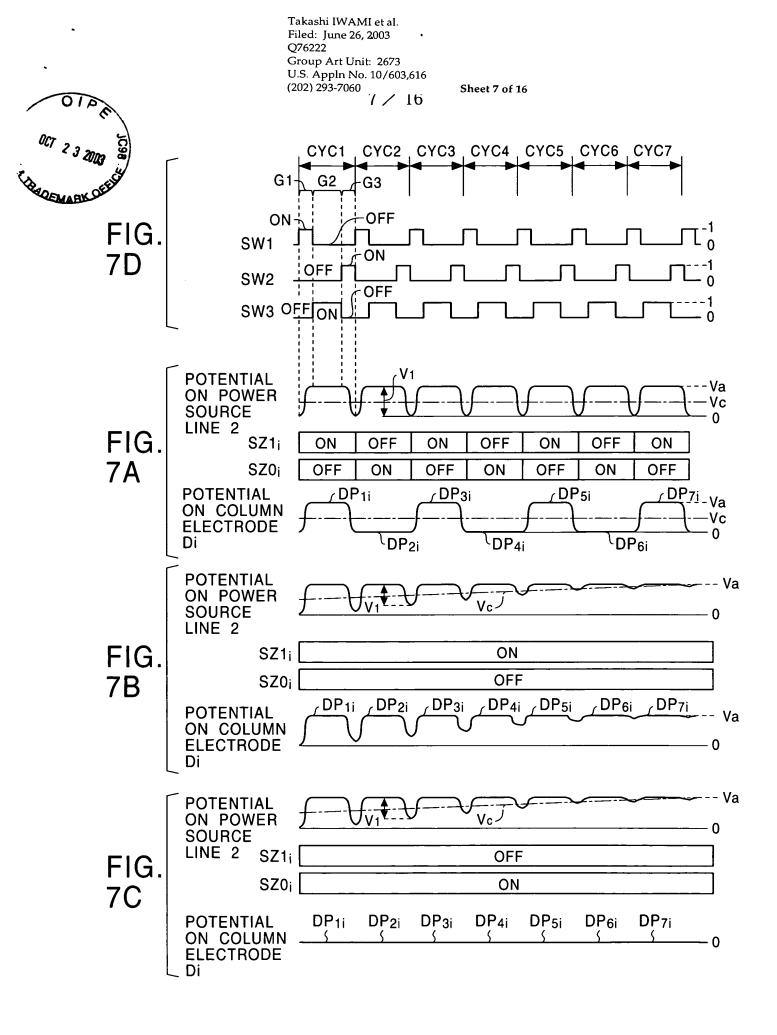
Group Art Unit: 2673 U.S. Appln No. 10/603,616 (202) 293-7060 U / 10

Sheet 6 of 16



FIG. 6

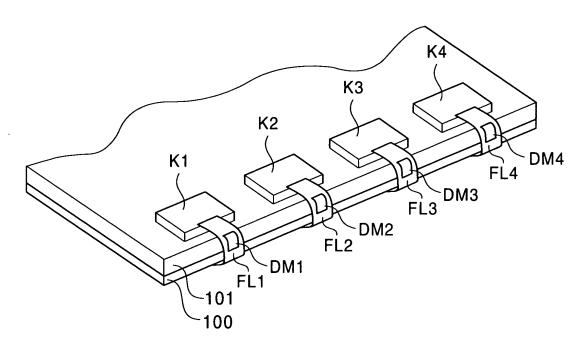




Sheet 8 of 16



FIG. 8



293-7060 9 / 16 Sheet 9 of 16

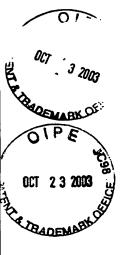


FIG. 9

$$DB_{(N,M)} = \begin{bmatrix} DB_{(1,1)} & DB_{(1,2)} & DB_{(1,3)} & \cdots & DB_{(1,m)} \\ DB_{(2,1)} & DB_{(2,2)} & DB_{(2,3)} & \cdots & DB_{(2,m)} \\ DB_{(3,1)} & DB_{(3,2)} & DB_{(3,3)} & \cdots & DB_{(3,m)} \\ \vdots & \vdots & \vdots & \vdots & \vdots \\ DB_{(n,1)} & DB_{(n,2)} & DB_{(n,3)} & \cdots & DB_{(n,m)} \end{bmatrix}$$

Takashi IWAMI et al. Filed: June 26, 2003

Q76222

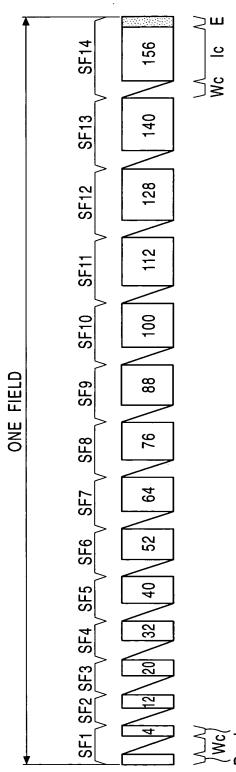
Group Art Unit: 2673 U.S. Appln No. 10/603,616 (202) 293-7060

10 / 16

Sheet 10 of 16



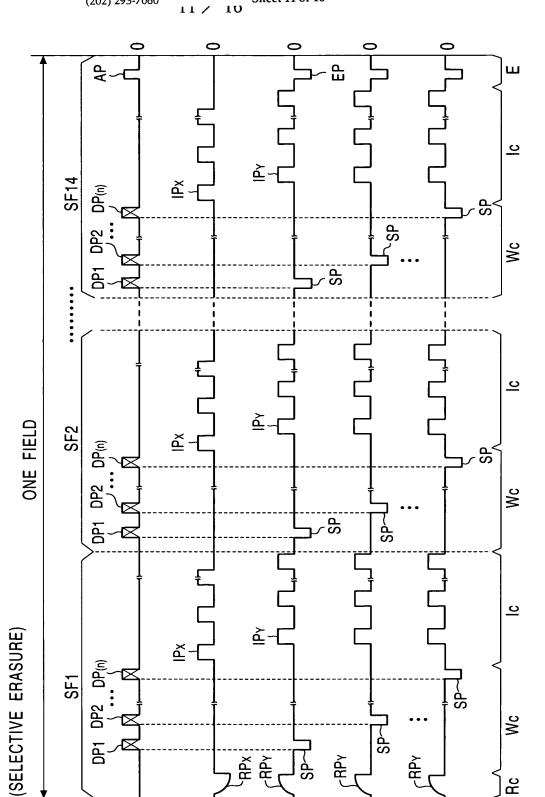
(SELECTIVE ERASURE)



BADEMABKO

Takashi IWAMI et al. Filed: June 26, 2008 Q76222 Group Art Unit: 2673 U.S. Appln No. 10/603,616 (202) 293-7060

Sheet 11 of 16

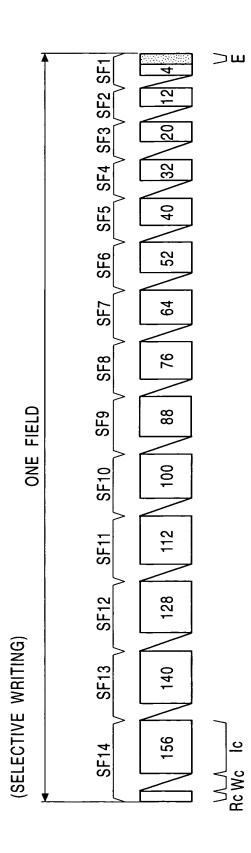


ಜ

Sheet 12 of 16



FIG. 12



Takashi IWAMI et al. Filed: June 26, 2003 Q76222 Group Art Unit: 2673

Q76222 Group Art Unit: 2673 U.S. Appln No. 10/603,616 (202) 293-7060 13 / 16

Sheet 13 of 16

OCT 23 MG S

FIG. 1

(SELECTIVE WRITING)

EMITTED	EMITTED LUMINANCE		4	16	36	89	108	160	224	300	388	488	009	728	868	1024
	SF SF 2 1		٥	Δ Δ	Δ Δ	Δ Δ	Δ Δ	Δ Δ	Δ Δ	\d	Δ Δ	Δ Δ	Δ Δ	Δ Δ	\[\delta \q	\d
				7	7 0	7	7	7 0	7	7	7	7 0	7	7 0	7 0	7
<u> </u>	11				7	7	7	7	7	7	7	7	7	7	7	7
	SF SF 5 4					7	7	7	4	7	7	7	7	7	7	7
LIGHT-EMISSION DRIVING PATTERN FOR ONE FIELI	SF S						7	4	4	4	4	4	4	4	4	\
×o	SF S							•	4	4	4	4	4	4	4	\ ⊲
SS OR OR	SF.S								_	٥	٥	۵	۵	۵	۵	۵
<u>⊠</u>	SF 6										۵	٥	۵	۵	٥	۵
LIGHT-EM PATTERN	SF 10											◁	◁	◁	◁	۵
GH	SF.												◁	◁	◁	۵
=9	SF 12													◁	◁	۵
	SF 13	i													◁	٥
	SF 14															٥
:	-	0	_	-	•	-	_	-	-	-	_	_	_	_	-	_
	2	0	0	-	-	-	-	-	-	-	-	-	•	-	-	-
□	က	0	0	0	_	_	•	•	-	•	-	-	-	-	•	-
SECOND UIT 34	4	0	0	0	0	-	•	_	_	_	-	_	•	_	-	-
SEC	ည	0	0	0	0	0	_	-	_	-	_		_	-	-	_
OF SE	9	0	0	0	0	0	0	_	-	_	_	_	_	-	_	•
	Da 3 7		0	0	0	0	0	0	_	_	_	_	_	_	_	_
TABLE SION	GD 9 8		0	0	0	0	0	0	0	_	_	_	_	_	_	_
TA	5	0	0	0	0	0	0	0	0	0		· —	•	· —	·	· -
SION TAE		0	0	0	0	0	0	0	0	0	0	0	_	-	_	_
RSI	12 11	0	0	0	0	0	0	0	0	0	0	0	0	-	_	_
VEI A (13	0	0	0	0	0	0	0	0	0	0	0	0	0	_	-
CONVERSION DATA CONVE	14 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	•
٥٥	PDs	0000	1000	0010	0011	0100	0101	0110	0111	1000	1001	1010	1011	1100	11011	1110
GRADATION -		_	2	က	4	5	9	7	80	თ	10	=	12	13	4	15

WHITE TRIANGLE: SELECTIVE WRITING DISCHARGE + SUSTAINED DISCHARGE EMISSION

Takashi IWAMI et al. Filed: June 26, 2003

Q76222

Group Art Unit: 2673 U.S. Appln No. 10/603,616 (202) 293-7060

14 / 16

Sheet 14 of 16



FIG. 14

(SELECTIVE WRITING)

					14	•	10									
EMITTED		0	4	16	36	89	108	160	224	300	388	488	009	728	868	1024
LIGHT-EMISSION DRIVING PATTERN FOR ONE FIELD SF SF SF SF SF SF SF SF 14 13 12 11 10 9 8 7 6 5 4 3 2 1			•	•	•	0 0 0	0 0 0 0	0 0 0 0 0	0 0 0 0 0 •	0 0 0 0 0 0	000000	00000000	000000000	0000000000	00000000000	• 0 0 0 0 0 0 0 0 0 0 0 0
	-	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0
	7	0	0	-	0	0	0	0	0	0	0	0	0	0	0	0
ੁ	က	0	0	0	-	0	0	0	0	0	0	0	0	0	0	0
SECOND UIT 35	4	0	0	0	0	-	0	0	0	0	0	0	0	0	0	0
띯트	5	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0
l col	9	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0
능흥	ъ 7	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0
밀물	ය 8	0	0	0	0	0	0	0	0	_	0	0	0	0	0	0
TABLE 3SION	6	0	0	0	0	0	0	0	0	0	•	0	0	0	0	0
N H	10	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0
CONVERSION TABLI DATA CONVERSION	11	0	0	0	0	0	0	0	0	0	0	0	_	0	0	0
	14 13 12	0	0	0	0	0	0	0	0	0	0	0	0	-	0	0
M∠	13	0	0	0	0	0	0	0	0	0	0	0	0	0	-	0
CONVE	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	PDs	0000	0001	0010	0011	0100	0101	0110	0111	1000	1001	1010	1011	1100	1101	1110
GRADATION		-	2	က	4	2	9	7	∞	တ	10	=	12	13	41	15

BLACK CIRCLE: SELECTIVE WRITING DISCHARGE + SUSTAINED DISCHARGE EMISSION WHITE CIRCLE: SUSTAINED DISCHARGE EMISSION

Group Art Unit: 2673 U.S. Appln No. 10/603,616 (202) 293-7060 Sheet 15 of 16 >ш $\supset_{\mathbf{u}}$ 156 SF12 **SF14** 156 140 140 SF13 **SF11** 128 **SF12** 128 SF10 **SF11** SF10 90 100 SF8 ONE FIELD 88 SF9 88 SF7 9/ SF8 9/ SF6 64 SF7 64 SF5 52 SF6 52 SF4 SF5 32 SF4 SF3 SF3 SF2 SF2 SF1 SF1

Takashi IWAMI et al. Filed: June 26, 2003 Q76222

•

Shoot 16 of 16



FIG. 16

